

REMARKS

Reconsideration and allowance of the present application based on the foregoing amendments and following remarks are respectfully requested.

By this Amendment, claims 1, 3-5 and 7-10 are amended, and claims 11 and 12 are newly added. Support for the amendments to the claims and new claims 11-12 may be found, for example, in the embodiments described in paragraphs [0053]-[0088] of the specification. No new matter is added. After entry of this Amendment, claims 1, 3-5, and 7-12 will remain pending in the patent application.

The Examiner indicated that the Information Disclosure Statement filed on January 14, 2005 (hereinafter the "Jan. 14 IDS") failed to comply with 37 C.F.R. 1.97(c) because it allegedly lacks a statement as specified in 37 C.F.R. 1.97(e). Applicant respectfully disagrees and directs the Examiner's attention to the third paragraph of the Jan. 14 IDS, which states "I hereby certify that each item of information contained in this Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Information Disclosure Statement. 37 CFR 1.97(e)(1)." Therefore, the Jan. 14 IDS fully complies with 37 C.F.R. 1.97(c). The Jan. 14 IDS also included English Abstracts of the non-English references. A copy of the stamped receipt, the Jan. 14 IDS and Form PTO-1449 are enclosed herewith. Accordingly, it is respectfully requested that the references cited in Form PTO-1449 be considered by the Examiner and that an initialed copy of this Form be returned to Applicant's representative in the next communication from the Office.

Claims 1, 3-4 and 7-8 were objected to because of various informalities noted in the Office Action. In response, claims 1, 3-4 and 7-8 are amended in the manner suggested by the Examiner. Accordingly, reconsideration and withdrawal of the objection to the claims are respectfully requested.

Claims 1, 3-5 and 7-10 were rejected under 35 U.S.C. §112, second paragraph. The rejection is respectfully traversed.

In claim 1, the recitation "the conveying gap" is changed to "a conveying gap". Furthermore, claim 1 is amended to positively recite that the controller is configured to control a tangential velocity of an outer surface of the reversing roller so that the reversing roller takes the sheets from the first conveying path at a tangential velocity that is the same as a conveying velocity of the first conveying path and supplies the sheets taken therein to the second conveying path at another tangential velocity, in a reverse rotation, that is higher than

the conveying velocity of the first conveying path, such that a conveying gap between a first sheet and a second succeeding adjacent sheet that are conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of lengths of the sheets. It is respectfully submitted that the language of amended claim 1 is clear and definite and positively recites what is controlled by the controller to make the gaps equal on the first and second conveying paths. As such, Applicant respectfully submits that the amendments to claim 1 obviate the rejection of this claim.

Claim 4 is amended to change the recitation “the conveying velocity of the second conveying path” to “a conveying velocity of the second conveying path”.

Claim 5 is amended to change the recitations “the second conveying path” to “a second conveying path”, “the lengths” to “lengths”, “the sheet” to “the sheets” and “its conveying direction” to “the conveying direction of the sheets”. Furthermore, claim 5 is amended to positively recite a method comprising, *inter alia*, controlling a tangential velocity of an outer surface of the reversing roller so that the reversing roller takes the sheets from the first conveying path at a tangential velocity that is the same as a conveying velocity of the first conveying path and supplies the sheets taken therein to the second conveying path at another tangential velocity, in the reverse rotation, higher than the conveying velocity of the first conveying path, such that a conveying gap of the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of lengths of the plural sheets. It is respectfully submitted that the language of amended claim 5 is clear and definite and positively recites what is controlled by the controller to make the gaps equal on the first and second conveying paths. As such, Applicant respectfully submits that the amendments to claim 5 obviate the rejection of this claim.

With respect to claim 8, this claim is amended to change the recitation “the conveying velocity” to “a conveying velocity”.

It is respectfully submitted that the amendments to claims 1, 4-5 and 8 obviate the rejection of these claims.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3-5 and 7-10 under 35 U.S.C. §112, second paragraph, are respectfully requested.

Claims 1, 3-5 and 7-10 were rejected under 35 U.S.C. §103(a) based on Repp *et al.* (U.S. Pat. No. 4,487,506) (hereinafter “Repp”) in view of Lohmann *et al.* (U.S. Pat. No. 5,449,166) (hereinafter “Lohmann”). The rejection is respectfully traversed.

As conceded by the Examiner on page 5 of the Office Action, Repp does not disclose, teach or suggest controlling the conveyance of the sheets so that the conveying gap between the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of the length of the sheets. However, Applicant respectfully submits that there are additional features that are absent in Repp.

For example, Repp does not disclose, teach or suggest a sheet reversing controller comprising, *inter alia*, a controller to control a tangential velocity of an outer surface of the reversing roller so that the reversing roller takes the sheets from the first conveying path at a tangential velocity that is the same as a conveying velocity of the first conveying path and supplies the sheets taken therein to the second conveying path at another tangential velocity, in a reverse rotation, that is higher than the conveying velocity of the first conveying path, such that a conveying gap between a first sheet and a second adjacent succeeding sheet that are conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of lengths of the sheets, as recited in claim 1 and its dependent claims.

Similarly, Repp does not disclose, teach or suggest a method comprising, *inter alia*, controlling a tangential velocity of an outer surface of the reversing roller so that the reversing roller takes the sheets from the first conveying path at a tangential velocity that is the same as a conveying velocity of the first conveying path and supplies the sheets taken therein to the second conveying path at another tangential velocity, in the reverse rotation, higher than the conveying velocity of the first conveying path, such that a conveying gap of the sheets conveyed on the second conveying path becomes equal to the specified gap when conveyed on the first conveying path regardless of lengths of the plural sheets, as recited in claim 5 and its dependent claims.

Lohmann fails to remedy the deficiencies of Repp. Lohmann discloses an apparatus for reversing the direction of an item that includes a first conveyor channel 1, a second conveyor channel 2 and a third conveyor channel 10. (*See* col. 2, lines 31-57).

However, unlike claims 1 and 5, Lohmann is silent as to feeding sheets to a second conveying path at a tangential velocity, in the reverse rotation, that is higher than the conveying velocity of the first conveying path. Lohmann merely discloses providing a constant gap between the sheets by adjusting the velocities of the first, second and third conveyor channels based on the item length, the belt velocity in the rest of the system and the time at which the rear edge of an item exits from the conveyor channel 1. (*See* col. 4, lines

44-68). Therefore, any reasonable combination of Repp and Lohmann cannot result in any way in the inventions of claims 1 and 5.

Furthermore, Applicant respectfully submits that there is no motivation or suggestion to combine the teachings of Repp and Lohmann.

The Examiner alleged that it would have been obvious to one of ordinary skill in the art to operate the controller of Repp so that the gap of the sheets conveyed on the second conveying path is equal to the gap when conveyed on the first conveying path regardless of paper length.

However, Applicant respectfully notes that this *post hoc* justification for the asserted combination is clearly based on an improper application of hindsight based on Applicant's own specification. There is clearly no indication that Repp is concerned with providing a gap between the sheets on the second conveying path that is the same as the gap on the first conveying path in order to avoid impact between the sheets.

Repp discloses that "the functioning of the present inverter is insensitive to paper size, weight, stiffness and coefficient of friction" and that the disclosed "device maintains positive control of copy sheets throughout the inversion process which results in high reliability and minimum skew damage for a wide range of paper weights, sizes, curl conditions and image content." (See col. 2, lines 35-50, emphasis added). As such, in view of the fact that Repp's device already provides accurate control of the sheets throughout the inversion process, one of ordinary skill in the art would clearly not be motivated to modify Repp's device in view of Lohmann's teachings, much less to modify Repp's device in view of Lohmann's teachings in order to have a gap between the sheets that is constant on the first conveying path and on the second conveying path.

For at least these reasons, Applicant respectfully submits that the Office Action has failed to establish a *prima facie* case that would render claims 1 and 5 obvious. (See MPEP 2143).

Claims 3-4 and 9 are patentable over Repp, Lohmann and a combination thereof at least by virtue of their dependency from claim 1 and for the additional features recited therein.

Similarly, claims 7-8 and 10 are patentable over Repp, Lohmann and a combination thereof at least by virtue of their dependency from claim 5 and for the additional features recited therein.

Accordingly, reconsideration and withdrawal of the rejection of claims 1, 3-5 and 7-10 under 35 U.S.C. §103(a) based on Repp in view of Lohmann are respectfully requested.

Claims 11 and 12 are newly added and define additional subject matter that is novel and non-obvious over the art of record. Claims 11 and 12 are patentable over Repp, Lohmann and a combination thereof at least by virtue of their dependency from claims 1 and 5, respectively, and for the additional features recited therein.

Applicant has addressed the Examiner's rejection and respectfully submits that the application is in condition for allowance. A notice to that effect is earnestly solicited. If any point remains in issue which the Examiner feels may be best resolved through a personal or telephone interview, please contact the undersigned at the telephone number listed below.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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Encl: copy of the stamped receipt, IDS and Form PTO 1449 dated January 14, 2005